

[0017] FIG. 2 is an alternative embodiment of the tray according to the invention.

[0018] FIG. 3 is an alternative embodiment of the tray according to the invention.

[0019] While the preferred embodiment of the invention is described with reference to anaesthesia processes and anaesthetic products and the drawings, the invention is not limited thereto. The invention is applicable in other areas of practice where monitoring of use and a normally predetermined sequence of use is desired.

[0020] Many anaesthesia practices are carried out according to relatively standard and repeatable steps, although naturally there often are variations. In other words, there is a sequence through which the practitioner often passes during the course of an operation. For example, the anaesthetist would normally administer drugs or medications in types or classes, amounts (usually volumes) and concentrations dependent on, amongst other things, body mass, degree of anaesthesia required, age, blood pressure, specific patient criteria etc., however, the drugs used in the main generally tend to follow certain predetermined sets of procedures.

[0021] There has always previously been a propensity for the practitioner to rely on a combination of skill, experience, memory, colleague verification and verification in relation to notes and procedures to ensure correct drugs are used. The present invention provides a means of reducing reliance on the above procedures to reduce mistakes. In particular, the invention provides a basis for reliance upon sequencing, monitoring and verification, utilising such features as coding, including colour codes, bar codes with comparison against predetermined data and similar techniques and combinations thereof to achieve risk reduction.

[0022] With reference to FIG. 1 typically drug ampoules are stored in the drawer D of an anaesthetist's trolley T. There is usually no uniformity of presentation, either visually or spacially and traditionally anaesthetists draw up contents of the ampoules into syringes for administration of the drugs in many steps, all of which are highly error prone.

[0023] The present invention provides both a means and apparatus to minimise errors utilising in the preferred form of the invention prefilled colour coded carriers in the form of syringes S (see FIGS. 2 and 3). The syringes S will usually be prefilled by a hospital pharmacy or pharmaceutical manufacturer/supplier and be neatly colour coded by class of drug and other details which may be necessary. Preferably the colours indicate drug classes rather than individual drugs as a drug error between classes is usually much more dangerous than one within a class.

[0024] Whilst the preferred form of the invention as described with reference to coding by colours, it is to be appreciated that in alternative forms of the inventions, alternative coding can be incorporated including any one or a combination of:

[0025] i. colour coding

[0026] ii. colour combinations

[0027] iii. pattern codes

[0028] iv. numeric codes

[0029] v. alpha codes

[0030] vi. bar codes

[0031] It is however to be appreciated that other forms and combinations of coding may be adopted without departing from the scope or sphere of the invention, as defined in the appended claims.

[0032] It will be appreciated that mass production of prefilled syringes and the like is substantially less prone to error than traditional techniques of staff filling to actual demand requirements. Colour coding by class will also minimise the total colours used making the classification system simpler. Whilst colour coding is preferred for classes of drugs, in alternative arrangements it will also be appreciated that a combination of drug class/individual drug may also be provided, for example utilising a two-tier code system or some other detectable identifier or combination of identifier.

[0033] Particularly with reference to FIG. 2, in the preferred form coloured syringe S labels S1 are used incorporating the name of the drug in bold print of a size that they will wrap around the syringe S barrel in a way that the colour code can be seen from any likely syringe orientation. In other forms of the invention it is envisaged the syringe body or plunger itself can be colour coded, such as at manufacture.

[0034] In the preferred form syringe marking scales will be retained and further, different densities or shades of colour on the label may be used to indicate the strength or concentration of the drug.

[0035] In alternative arrangements it is envisaged that syringes S or other dispensing apparatus may be prefilled and supplied by drug companies in a substantially complete state. By providing the drugs in a "batch manufactured" manner it is envisaged that further risk reduction will be achieved, the code can also hold this information if required.

[0036] In the preferred form of the invention and with reference to FIGS. 1, 2, and 3, syringes S are provided in conjunction with a drug tray 1. It is envisaged that anaesthetic procedures will be divided into preferably three classes according to factors, such as complexity, for example "minor", "intermediate" and "major". Sealed sterile plastic trays 1 will be prepackaged with prefilled coded syringes S of the drug classes needed in the "standard" anaesthetic procedure for each of the three classes, resulting in three classes of drug tray 1.

[0037] Referring predominantly to FIG. 2 the tray 1 design preferably incorporates separate sites or compartments 2 each, if required, incorporating individually sealed rip-top covers 3 for each compartment 2. Each compartment 2 is the same coded colour 2c as the prefilled syringe S which that compartment 2 is intended to house either by a suitable label or permanent marking 2c on the compartments. The compartments 2 are preferably arranged in a positionally sensitive manner allowing the syringes S to be used from, for example, left to right across the tray 1 as the anaesthetic procedure proceeds.

[0038] Each compartment 2 is preferably provided with two subcompartments, a first subcompartment 2a or site, and a second subcompartment 2b or site. The first subcompartment 2a is preferably provided adjacent to a tray front 4 for